

**CWA COMPLIANCE EVALUATION INSPECTION REPORT
U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION 5**

Purpose: Compliance Evaluation Inspection

Facility: Greenville Livestock, Inc
25815 Hugo Road
Centralia, IL 62801

NPDES Permit Number: None

Date of Inspection: September 9, 2010

EPA Representatives: Joan Rogers, Environmental Scientist 312-886-2785

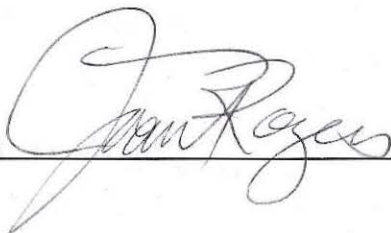
State Representatives: Joe Stitely, Engineer 618-993-7200
Bruce Rodely, Engineer 618-993-7200

Facility Representatives: [FOIA Exemption (b) (6)], President [FOIA Exemption (b) (6)]
[FOIA Exemption (b) (6)], Vice-President [FOIA Exemption (b) (6)]
[FOIA Exemption (b) (6)], Manager [FOIA Exemption (b) (6)]
[FOIA Exemption (b) (6)] Settje Agri-Services [FOIA Exemption (b) (6)]

Report Prepared by: Joan Rogers, Environmental Scientist 312-886-2785
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Report Date: November 11, 2010

Inspector Signature



BACKGROUND

The purpose of this report is to describe, evaluate and document Greenville Livestock, Inc's compliance with the Clean Water Act (CWA) and their progress toward compliance with the Administrative Order (Order), Docket Number V-W-08-AO-07, effective on October 2, 2008.

EPA conducted an inspection of Greenville Livestock, Inc. on March 26, 2008. The findings of that inspection led EPA to issue the above mentioned Order. EPA initiated this announced inspection to verify compliance with the Order in preparation for close-out.

Greenville Livestock, Inc. is a backgrounding facility that raises cattle from 500 to 800 pounds. The facility confines roughly 2000 head of cattle between the months of November and April. Greenville Livestock, Inc. feeds their cattle wheat and corn silage.

When the cattle reach 800 pounds, Greenville Livestock, Inc. trucks the cattle to a finishing facility where they stay until slaughter. Greenville Livestock, Inc. has 493 acres for land application of manure. The production area is roughly 200 acres and includes 15 feedlots, roughly four pastures, a sick cow barn, five buildings with attached feedlots, a machine building, and an office. (See attachment A, Aerial Photo.)

Greenville Livestock, Inc. lies adjacent to Prairie Creek, a water of the United States.

SITE INSPECTION

EPA arrived at Greenville Livestock, Inc. at approximately 9:45am. The temperature was approximately 70°F with an overcast sky. EPA had arranged the date and time of inspection with Greenville and IEPA representatives through email.

EPA met the IEPA inspectors and then entered the Greenville Livestock office where EPA presented credentials to the receptionist in the facility's office. The receptionist called for FOIA Exemption (b) (6). When FOIA Exemption (b) (6) arrived, he explained that FOIA Exemption (b) (6) would be arriving shortly. FOIA Exemption (b) (6), representing the contractor, Settje Agri-Services, was at the facility also.

FOIA Exemption (b) (6) spoke about the work that had been done to the facility in response to the Administrative Order. All the construction had only recently been completed on September 1st and seeding of the disturbed land was scheduled to take place within a week of the inspection. The Comprehensive Nutrient Management Plan that was required to be created for the Order, had not been completed. EPA discussed the need for Greenville to complete this requirement as soon as possible. Greenville and Mr. Westerbuhr agreed to work on this.

EPA put on disposable boots and began the site inspection by driving to the Pen 14 area. A dirt berm had been built around the sides and back of Pen 14 to contain any runoff of process wastewater. This berm created a basin around the pen known as Basin 1F. A pipe to collect the process wastewater was installed under the basin and a riser pipe allows liquids to enter the pipe and flow by gravity to the southwest. The pipe discharges the process wastewater to a concrete pit on the southeast side of the Pen 15 area. From the pit, the process wastewater is pumped to the newly built, 22 million gallon Holding Pond on the north side of Hugo Road. The pit on the southeast side of

Pen 15 is located in a similar basin that had been built around Pen 15. The basin around Pen 15 is known as Basin 1C. Process wastewater from Pen 15 flows into Basin 1C and then to the concrete pit. It is then pumped to the Holding Pond.



IMGP0392: Riser Pipe for basin 1F by Pen 14. Process wastewater flows into the riser pipe in basin 1F and then flows by gravity to basin 1C by Pen 15. From there it is pumped to the Holding Pond.

Location: Access road by Pen 14

Facing: East

Date/Time: 09/09/10 10:38 A.M.



IMGP0399: Pit for pump out of Basin 1C. Pipe in wall comes from Basin 1F by Pen 14.

Location: Basin 1C.

Facing: Northeast

Date/Time: 09/09/10 10:46 A.M.



IMGP0401: All the pens by Pen 15 are enclosed by a dirt berm, forming Basin 1C. All process wastewater would flow to the pit in Basin 1C and would then be pumped to the Holding Pond.

Location: Basin 1C.

Facing: Southwest

Date/Time: 09/09/10 10:51 A.M.

EPA then drove southeast along Hugo Road to observe Pens 11 and 12. A basin had been constructed on the northwest side of Pens 11 and 12 to capture the process wastewater from these pens. This basin is called Basin 1D. A pit, like the one in Basin 1C, had been installed in this basin. Flow from Basin 1D enters the pit and is then pumped to the Holding Pond.

The concrete pit in Basin 1D also accepts flow from the Silage Area. A pipe under Hugo Road from the Silage Area, gravity feeds silage leachate and process wastewater from the Silage Area directly to the concrete pit.

Additionally, a pipe from a basin by Pen 10, Basin 1E, also discharged to the pit in Basin 1D. The process wastewater from Pen 10 flows into Basin 1E and then by gravity to the concrete pit in Basin 1D. Cleanout pipes in the pasture between Pen 10 and Pens 11 and 12 identified the location of the pipe underground. This pipe passes under the feedlot of the area formerly known as the South Silo Area and a clean out for the pipe was located in this feedlot.

In previous inspections, EPA identified a storm water pathway that flowed from the pasture of Pen 10, and through the feedlot of what was formerly known as the South Silo Area. The pathway then flowed through a culvert under an access road southeast of Pens 11 and 12, and exited in the pasture northwest of Pens 11 and 12. During this current inspection, EPA again observed that the storm water was able to mix with manure in the feedlot south of the South Silo Area and discharge to the yard northwest of Pens 11 and 12. A puddle in the storm water pathway appeared to contain manure from the feedlot. IEPA suggested changing the clean out pipe in the South Silo feedlot to a riser pipe to allow process wastewater from the South Silo Area to enter the pipe. IEPA also suggested a berm could be installed to block the manure from reaching the storm water pathway. Facility representatives agreed and provided photos on September 29, 2010 that this suggestion was implemented.



IMGP0411: Basin 1D by Pens 11 and 12 and concrete pit for pumping process wastewater from this basin to the Holding Pond. Pit also accepts flow from Basin 1E by Pen 10 and process wastewater from the Silage Area. All is then pumped to the Holding Pond.

Location: Along Hugo Road northwest of Pens 11 and 12.

Facing: Southwest

Date/Time: 09/09/10 11:08 A.M.



IMGP0404: Storm water pathway through pasture southeast of Pens 11 and 12. Storm water goes under access road via a culvert which discharges in the field beyond Basin 1D.

Location: Access road southeast of Pens 11 and 12.

Facing: Southeast

Date/Time: 09/09/10 10:59 A.M.



IMGP0405: Area formally known as the South Silo Area. There is still a potential for process wastewater to enter storm water pathway which is located at the bottom of the photo. Storm water pathway is identified by a blue arrow.

Location: Access road southeast of Pens 11 and 12.

Facing: Northeast

Date/Time: 09/09/10 11:01 A.M.



IMGP0406: Standing puddle of water seems to contain manure and process wastewater. IEPA suggested berming up South Silo feedlot and changing a clean out pipe to a riser pipe. This would allow process wastewater from South Silo Area to tie in to the pipe that flows underneath.

Location: Area formerly known as the South Silo Area.

Facing: Down

Date/Time: 09/09/10 11:01 A.M.



IMGP0407: Cleanout pipe for process wastewater pipe from Pen 10 and Basin 1E. IEPA suggested adding a small basin around this pipe and then change it to a riser pipe to collect process wastewater from South Silo Area and berm around it to keep storm water pathway clean.

Location: South of South Silo Area.

Facing: Southeast

Date/Time: 09/09/10 11:04 A.M.



dsc_0109: Photo provided by Greenville Livestock showing that clean out pipe had been changed to a riser pipe and berm had been added to keep process wastewater from South Silo Area out of the storm water pathway.

Location: South Silo Area

Facing: Northwest

Date/Time: 09/29/10 8:31 A.M.



dsc_0108: Photo provided by Greenville Livestock showing that clean out pipe had been changed to a riser pipe in the South Silo Area feedlot.

Location: South Silo Area

Facing: Northwest

Date/Time: 09/29/10 8:31 A.M.

EPA and IEPA also noted that there was no backup system in place at the two pumps in the concrete pits to notify facility personnel that a pump had failed. IEPA suggested adding a light on top of the pump box to indicate that the pump wasn't working. Facility representatives agreed and provided photos on September 29, 2010 that this suggestion had been implemented.



dsc_0103: Photo provided by Greenville Livestock. Indicator lights have been installed at pump in concrete pit in Basin 1C.

Location: Concrete pit in Basin 1C by Pen 15.

Facing: Southwest

Date/Time: 09/29/10 8:31 A.M.



dsc_0106: Photo provided by Greenville Livestock. . Indicator lights have been installed at pump in concrete pit in Basin 1D.

Location: Concrete pit in Basin 1D by Pens 11 and 12.

Facing: Southwest

Date/Time: 09/29/10 8:31 A.M.

At the Silage Area, silage leachate and process wastewater flow to a drain in the ground which drains to a basin to the northwest. This basin, Basin 1G has a riser pipe in it that allows the process wastewater to flow by gravity to Basin 1D, by Pens 11 and 12.



IMGP0420: Silage leachate flows into basin 1G via the drain. Drain identified by green circle.

Location: Silage Area.

Facing: South

Date/Time: 09/09/10 11:10 A.M.



IMGP0416: Basin 1G collects process wastewater from silage area. It is then gravity fed under Hugo Road to a concrete pit in Basin 1D where it is then pumped to the Holding Pond.

Location: Silage Area.

Facing: West

Date/Time: 09/09/10 11:09 A.M.

EPA drove next to Pen 10 and observed the basin for Pen 10, Basin 1E.



IMGP0421: Basin 1E for Pen 10. This is the beginning of the process wastewater pipe that goes under the South Silo Area feedlot and Pens 11 and 12. It discharges to the concrete pit in Basin 1D.

Location: Pen 10.

Facing: Northwest

Date/Time: 09/09/10 11:16 A.M.

In similar fashion, basins have been built to accept process wastewater from Pens 1-9. One section of Basin 1B accepts runoff from Pens 1-3. Process wastewater from these basins flows by gravity pipe directly to the Holding Pond.



IMGP0423: Riser pipe in this section of Basin 1B accepts process wastewater from Pens 1-3. Gravity takes flow to Holding Pond.

Location: Basin 1B.

Facing: North

Date/Time: 09/09/10 11:20 A.M.



IMGP0427: Another section of Basin 1B accepts process wastewater from Pens 4-8. The pipes from the two sections of Basin 1B "Y" together and flow by gravity to the Holding Pond.

Location: Basin 1B.

Facing: North

Date/Time: 09/09/10 11:21 A.M.



IMGP0430: Process wastewater from Pen 9 flows to Basin 1A to the west of Pen 9. Basin 1A is in the background beyond the pen in the photo. From Basin 1A, the process wastewater flows by gravity to the Holding Pond.

Location: Northeast corner of Pen 9.

Facing: West

Date/Time: 09/09/10 11:27 A.M.



IMGP0431: Riser pipe in Basin 1A.

Location: West of Pen 9.

Facing: North

Date/Time: 09/09/10 11:28 A.M.

EPA then observed the new 22 million gallon Holding Pond and the outlets of the pipes from the concrete pits and basins. Splash pads have been installed under the outlets of each pipe in the Holding Pond.

On the north side of the Holding Pond is an outlet for the pond that allows the contents of the Holding Pond to be pumped under Prairie Creek to the center of an agricultural field. Here the pipe is connected to a center pivot for land application purposes. The pipe under Prairie Creek is an eight inch pipe and it itself is encased in a twelve inch pipe for extra protection of the creek.



IMGP0433: The Holding Pond holds 22 million gallons. Green pipe in foreground is pipe from basin 1A. Prairie Creek is located in the tree line in the background.

Location: East berm of Holding Pond.

Facing: Northwest

Date/Time: 09/09/10 11:29 A.M.



IMGP0434: Pipe to Holding Pond from Basin 1B is in foreground. Further along the berm, the pipe from Basin 1D enters the Holding Pond.

Location: East berm of Holding Pond.

Facing: Southwest

Date/Time: 09/09/10 11:29 A.M.



IMGP0436: Pipe from basin 1C to the Holding Pond.

Location: East berm of Holding Pond.

Facing: Southwest

Date/Time: 09/09/10 11:30 A.M.



IMGP0439: Staff gauge in Holding Pond. Each rung is two feet of depth.
 Location: East berm of Holding Pond.
 Facing: West
 Date/Time: 09/09/10 11:31 A.M.

In previous inspections, it had been noted that storm water from the neighbor's property to the east had entered Greenville Livestock property. Greenville's engineers utilized culverts to capture the flow of this storm water and pipe it to the north around Pens 5-9. The storm water then discharges to Prairie Creek without coming into contact with any manure in the pens.



IMGP0429: Inflow from neighboring field is diverted from the Pens. It enters these pipes on the east side of the road east of Pen 4.
 Location: Access road on east side of facility.
 Facing: East
 Date/Time: 09/09/10 11:24 A.M.

EPA then drove along Hugo Road to where the storm water pathway that exits the culvert under Pens 11 and 12 could be observed. The storm water flow discharges to a field beyond Basin 1D. No cattle are allowed in this field. The storm water flow then goes to the roadside ditch on the south side of Hugo Road and then to Prairie Creek.



IMGP0440: The storm water culvert pipe outlet under Pens 11 and 12. Discharge is to the field beyond the pens and Basin 1D.

Location: Hugo Road northwest of Pens 11 and 12.

Facing: South

Date/Time: 09/09/10 11:38 A.M.



IMGP0442: Storm water pathway flows under fence and to roadside ditch on south side of Hugo Road before joining Prairie Creek.

Location: Hugo Road northwest of Pens 11 and 12.

Facing: South

Date/Time: 09/09/10 11:38 A.M.

EPA concluded the site inspection with observation of Pen 15 and the area around the commodities barns. In previous inspections, EPA witnessed process wastewater flow to a culvert in the ground behind the barns. This allowed the process wastewater to access a vegetated area and then discharge to Prairie Creek. This culvert still allows process wastewater to flow to the vegetated area, but the berm that encircled the pens, creating Basin 1C, now prevents the flow from reaching Prairie Creek. Instead, any process wastewater from the pens or the commodity sheds stays in Basin 1C and the flow is directed to the concrete pit. From there, it is pumped to the Holding Pond.



IMGP0444: Culvert for process wastewater near commodity barns and Pen 15. Flow goes to vegetated area behind fence. From there, the process wastewater would flow to basin 1C.

Location: Pen 15.

Facing: Down

Date/Time: 09/09/10 11:40 A.M.



IMGP0447: Vegetated area that behind Pen 15. Berm for Basin 1C can be seen in the background.

Location: Pen 15.

Facing: South

Date/Time: 09/09/10 11:41 A.M.

BRIEFING AND EXIT BRIEFING

EPA then drove back to the Greenville Livestock, Inc. office to brief [REDACTED] on the findings. EPA explained that while the basin system looks good around all the pens, the feedlot by the area formerly known as the South Silo Area still has the potential to allow process wastewater to enter a storm water pathway and discharge to Prairie Creek. EPA discussed the suggestions of the IEPA representatives.

EPA also discussed the idea to install indicator lights on the pump boxes to indicate if a pump was not functioning.

Finally, EPA reiterated the need to complete the CNMP, as it was a requirement of the Administrative Order. EPA indicated that the Order could be closed out as soon as this requirement was complete.

EPA exited the facility at approximately 1:00 P.M.

ATTACHMENTS

A) Aerial Photo

